

## CLAIMS:

1. A method of compressing a video signal, the method comprising:  
predictively encoding (10,11) frames (X) of said video signal with reference to  
a prediction frame ( $X_p$ ),

5 calculating (20) a quantization parameter (q) for each encoded frame,  
quantizing (12) the encoded frames in accordance with said quantization  
parameter,

characterized in that said step of calculating the quantization parameter  
includes calculating a first quantization parameter (q) representing a first quality or bit rate  
for quantizing selected first frames (P) of said predictively encoded frames, and a second  
10 quantization parameter (F.q) representing a second quality or bit rate that is lower than said  
first quality or bit rate for quantizing selected second frames (P') of the video signal, the  
method further including:

decompressing (15-18) the compressed second frames to constitute the  
prediction frame ( $X_p$ ) for predictively encoding the first frames.

15 2. A method as claimed in claim 1, wherein the step of calculating the second  
quantization parameter includes calculating said first quantization parameter (q) and  
multiplying (23) said first quantization parameter by a given factor (F).

20 3. A method as claimed in claim 1, wherein said predictively encoded frames  
constitute a series of successive frames, the second selected frames being every other frame  
of said series.

4. An arrangement for compressing a video signal, the arrangement comprising:  
25 encoding means (10,11) for predictively encoding frames (X) of said video  
signal with reference to a prediction frame ( $X_p$ ),  
calculation means (20) for calculating a quantization parameter (q) for each  
encoded frame,

a quantizer (12) for quantizing the encoded frames in accordance with said quantization parameter,

characterized in that said calculation means (20) are arranged to calculate a first quantization parameter representing a first quality or bit rate for quantizing selected first frames (P) of said predictively encoded frames, and a second quantization parameter (F.q) representing a second quality or bit rate that is lower than said first quality or bit rate for quantizing selected second frames (P') of the video signal, the arrangement further including:

means (15-18) for decompressing the compressed second frames to constitute said prediction frame ( $X_p$ ) for predictively encoding first selected frames.

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5. An arrangement as claimed in claim 4, wherein said calculation means (20) comprise a multiplier (23) for multiplying the first quantization parameter (q) by a given factor (F).

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6. An arrangement as claimed in claim 4, wherein said predictively encoded frames constitute a series of successive frames, the second selected frames being every other frame of said series.

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7. A compressed video signal, comprising:  
a prediction frame ( $X_p$ ),  
predictively encoded (10,11) frames (X) that have been predictively encoded with reference to the prediction frame ( $X_p$ ),

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respective quantization parameters (q) for respective encoded frames, the encoded frames having been quantized (12) in accordance with said respective quantization parameters, the quantization parameters including first quantization parameters (q) representing a first quality or bit rate for quantizing selected first frames (P) of said predictively encoded frames, and second quantization parameters (F.q) representing a second quality or bit rate that is lower than said first quality or bit rate for quantizing selected second frames (P') of the video signal.

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8. A storage medium (122) on which the compressed video signal of claim 7 has been stored.

9. A method of transmitting or recording a video signal, the method comprising:

TRANSMISSION

generating the compressed video signal of claim 7; and  
transmitting or storing the compressed video signal.

10. An arrangement for transmitting or recording a video signal, the arrangement  
5 comprising:  
means (100) for generating the compressed video signal of claim 7; and  
means (108, 120) for transmitting or recording the compressed video signal.